

```

BBBBBBBBBBBBBB      AAAAAAAAAA      SSSSSSSSSSSSSS      RRRRRRRRRRRR      TTTTTTTTTTTTTTTT      LLL
BBBBBBBBBBBBBB      AAAAAAAAAA      SSSSSSSSSSSSSS      RRRRRRRRRRRR      TTTTTTTTTTTTTTTT      LLL
BBBBBBBBBBBBBB      AAAAAAAAAA      SSSSSSSSSSSSSS      RRRRRRRRRRRR      TTTTTTTTTTTTTTTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAAAAAAAAAAAAAAAAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAAAAAAAAAAAAAAAAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAAAAAAAAAAAAAAAAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSSSSSSSSSSSSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSSSSSSSSSSSSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSSSSSSSSSSSSS      RRR      RRR      TTT      TTT      LLL

```

```
BBBBBBBBB      AAAAAA      SSSSSSSS      CCCCCCCC      LL      000000      SSSSSSSS      FFFFFFFFFF
BBBBBBBBB      AAAAAA      SSSSSSSS      CCCCCCCC      LL      000000      SSSSSSSS      FFFFFFFFFF
BB          BB  AA      AA  SS          CC          LL      00      SS          FF
BB          BB  AA      AA  SS          CC          LL      00      SS          FF
BB          BB  AA      AA  SS          CC          LL      00      SS          FF
BB          BB  AA      AA  SS          CC          LL      00      SS          FF
BBBBBBBBB      AA      AA  SSSSSS      CC          LL      00      SSSSSS      FFFFFFFF
BBBBBBBBB      AA      AA  SSSSSS      CC          LL      00      SSSSSS      FFFFFFFF
BB          BB  AAAAAAAAAA      SS          CC          LL      00      SS          FF
BB          BB  AAAAAAAAAA      SS          CC          LL      00      SS          FF
BB          BB  AA      AA  SS          CC          LL      00      SS          FF
BB          BB  AA      AA  SS          CC          LL      00      SS          FF
BBBBBBBBB      AA      AA  SSSSSSSS      CCCCCCCC      LLLLLLLLLL      000000      SSSSSSSS      FFFFFFFFFF
BBBBBBBBB      AA      AA  SSSSSSSS      CCCCCCCC      LLLLLLLLLL      000000      SSSSSSSS      FFFFFFFFFF

LL          111111      SSSSSSSS
LL          111111      SSSSSSSS
LL          11      SS
LL          11      SS
LL          11      SS
LL          11      SS
LL          11      SSSSSS
LL          11      SSSSSS
LL          11      SS
LL          11      SS
LL          11      SS
LL          11      SS
LLLLLLLLLL      111111      SSSSSSSS
LLLLLLLLLL      111111      SSSSSSSS
```

```

1 0001 0 MODULE BAS$CLOSE (
2 0002 0 IDENT = '1-008'
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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25 0025 1 *
26 0026 1 *****
27 0027 1
28 0028 1
29 0029 1
30 0030 1 **
31 0031 1 FACILITY: BASIC-PLUS-2 I/O SUPPORT
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1
35 0035 1 This module contains the routine which closes a file for
36 0036 1 a BASIC program.
37 0037 1
38 0038 1 ENVIRONMENT: VAX-11 User Mode
39 0039 1
40 0040 1 AUTHOR: John Sauter, CREATION DATE: 16-FEB-1979
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original. JBS 16-FEB-1979
45 0045 1 1-002 - Use BASIOERR.REQ to define the I/O error codes. JBS 20-FEB-1979
46 0046 1 1-003 - Set up ISB$A_USER_FP. JBS 25-JUL-1979
47 0047 1 1-004 - Purge the I/O buffer explicitly, since OT$$$CLOSE_FILE doesn't
48 0048 1 any more. JBS 27-AUG-1979
49 0049 1 1-005 - If the file has had more than one stream connected to it, disconnect
50 0050 1 the other streams. JBS 28-SEP-1979
51 0051 1 1-006 - Call BAS$FIELD_CLOSE to remove fielded variables from
52 0052 1 the symbol table, in case the compiler doesn't. PLL 2-JUN-81
53 0053 1 1-007 - Remove the call to BAS$FIELD_CLOSE, as it is unshared and BAS$CLOSE
54 0054 1 is shared. PL 16-Jun-81
55 0055 1 1-008 - call BAS$FIELD_CLOSE now, as all BAS$ entry points are now shared.
56 0056 1 MDL 26-Mar-1984
57 0057 1 --

```


BASCLOSE
1-008

D 7
16-Sep-1984 00:07:54
14-Sep-1984 11:54:47

VAX-11 Bliss-32 V4.0-742
[BASRTL.SRC]BASCLOSE.B32;1

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: 58
: 59
0058 1
0059 1 !<BLF/PAGE>

```

61      0060 1  |
62      0061 1  | SWITCHES:
63      0062 1  |
64      0063 1  |
65      0064 1  | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
66      0065 1  |
67      0066 1  |
68      0067 1  | LINKAGES:
69      0068 1  |
70      0069 1  |
71      0070 1  | REQUIRE 'RTLIN:OTSLNK';           ! Define all the linkages
72      0499 1  |
73      0500 1  |
74      0501 1  | TABLE OF CONTENTS:
75      0502 1  |
76      0503 1  |
77      0504 1  | FORWARD ROUTINE
78      0505 1  |     BASSCLOSE : NOVALUE;         ! Close a file from BASIC
79      0506 1  |
80      0507 1  |
81      0508 1  | INCLUDE FILES:
82      0509 1  |
83      0510 1  |
84      0511 1  | REQUIRE 'RTLIN:RTLPSECT';       ! Macros for defining psects
85      0606 1  |
86      0607 1  | REQUIRE 'RTLML:OTSLUB';         ! Define symbols in the LUB
87      0747 1  |
88      0748 1  | REQUIRE 'RTLML:OTSISB';         ! Define symbols in the ISB
89      0916 1  |
90      0917 1  | REQUIRE 'RTLIN:BASIOERR';       ! Define the I/O error codes.
91      0970 1  |
92      0971 1  | LIBRARY 'RTLSTARLE';           ! Define system symbols
93      0972 1  |
94      0973 1  |
95      0974 1  | MACROS:
96      0975 1  |
97      0976 1  |     NONE
98      0977 1  |
99      0978 1  | EQUATED SYMBOLS:
100     0979 1  |
101     0980 1  |     NONE
102     0981 1  |
103     0982 1  | PSECTS:
104     0983 1  |
105     0984 1  | DECLARE_PSECTS (BAS);           ! Declare psects for BASS$ facility
106     0985 1  |
107     0986 1  | OWN STORAGE:
108     0987 1  |
109     0988 1  |     NONE
110     0989 1  |
111     0990 1  | EXTERNAL REFERENCES:
112     0991 1  |
113     0992 1  |
114     0993 1  | EXTERNAL ROUTINE
115     0994 1  |     BASS$CB_PUSH : JSB CB_PUSH NOVALUE, ! Load register CCB
116     0995 1  |     BASS$CB_POP  : JSB CB_RET NOVALUE,   ! Done with register CCB
117     0996 1  |     BASS$STOP_IO : NOVALUE,             ! signals fatal I/O error
```

BASSCLOSE
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14-Sep-1984 11:54:47 [BASRTL.SRC]BASCLOSE.B32:1

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```
: 118      0997 1      BASS$PUR IO CLO : CALL CCB,      ! Purge I/O buffer
: 119      0998 1      BASS$FIELD_CCLOSE : NOVALUE,      ! delete FIELDed variables on this channel
: 120      0999 1      BASS$CLOSE_ALL : NOVALUE,      ! Close all files with a certain IFI
: 121      1000 1      OTS$CLOSE_FILE;      ! RMS Close a file
: 122      1001 1
: 123      1002 1
: 124      1003 1      !+ The following are the error codes used in this module.
: 125      1004 1      !-
: 126      1005 1
: 127      1006 1      EXTERNAL LITERAL
: 128      1007 1      BASSK_PROLOSSOR : UNSIGNED (8);      ! Program lost, sorry
: 129      1008 1
: 130      1009 1
```

```
132 1010 1 GLOBAL ROUTINE BASCLOSE (           ! Close a file
133 1011 1     CHANNEL                         ! The BASIC channel number
134 1012 1     ) : NOVALUE =
135 1013 1
136 1014 1 ++
137 1015 1 FUNCTIONAL DESCRIPTION:
138 1016 1
139 1017 1     Close an I/O channel from a BASIC-PLUS-2 program.
140 1018 1
141 1019 1 FORMAL PARAMETERS:
142 1020 1
143 1021 1     CHANNEL.rl.v    The number of an open channel, which is to
144 1022 1                     be closed.
145 1023 1
146 1024 1 IMPLICIT INPUTS:
147 1025 1
148 1026 1     NONE
149 1027 1
150 1028 1 IMPLICIT OUTPUTS:
151 1029 1
152 1030 1     NONE
153 1031 1
154 1032 1 ROUTINE VALUE:
155 1033 1 COMPLETION CODES:
156 1034 1
157 1035 1     NONE
158 1036 1
159 1037 1 SIDE EFFECTS:
160 1038 1
161 1039 1     Closes the specified channel.
162 1040 1
163 1041 1 --
164 1042 1
165 1043 2 BEGIN
166 1044 2
167 1045 2 BUILTIN
168 1046 2     FP;
169 1047 2
170 1048 2 GLOBAL REGISTER
171 1049 2     CCB = K_CCB_REG : REF BLOCK [, BYTE];
172 1050 2
173 1051 2 LOCAL
174 1052 2     FMP : REF BLOCK [, BYTE];
175 1053 2
176 1054 2     FMP = .FP;
177 1055 2
178 1056 2 + For compatability with the PDP-11 implementations, an attempt to
179 1057 2 CLOSE channel 0 is a no-operation.
180 1058 2
181 1059 2
182 1060 2 IF (.CHANNEL NEQ 0)
183 1061 2 THEN
184 1062 2     BEGIN
185 1063 2
186 1064 2 +
187 1065 2 Set up register CCB to point to the LUB/ISB/RAB for this channel.
188 1066 2
```


BAS\$CLOSE
1-008

H 7
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VAX-11 Bliss-32 V4.0-742
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```
189 1067 BAS$$CB_PUSH (.CHANNEL, LUB$K_LUN_MIN);
190 1068 CCB [ISB$A_USER_FP] = .FMP [SF$L_SAVE_FP];
191 1069
192 1070 + Purge the I/O buffer. This will only happen on a non-forcible device
193 1071 - on which the last PRINT statement ended with a comma or semicolon.
194 1072
195 1073 BAS$$PUR_IO_CLO ();
196 1074
197 1075 +
198 1076 - get rid of any FIELDed variables on this channel, they are no longer valid.
199 1077
200 1078 IF .CCB [LUB$V_FIELD_USE]
201 1079 THEN
202 1080 BAS$FIELD_CLOSE (.CHANNEL);
203 1081
204 1082 +
205 1083 - RMS CLOSE the file, if it is open.
206 1084
207 1085
208 1086 IF (.CCB [LUB$V_OPENED])
209 1087 THEN
210 1088 BEGIN
211 1089
212 1090 + If the file might have other streams connected, disconnect them.
213 1091 -
214 1092
215 1093 IF (.CCB [LUB$V_M_STR_C]) THEN BAS$$CLOSE_ALL (.CCB [LUB$W_IF1]);
216 1094
217 1095 IF ( NOT OTS$$CLOSE_FILE () ) THEN BAS$$STOP_IO (BAS$K_IOERR_REC);
218 1096
219 1097 END;
220 1098
221 1099 +
222 1100 - We are done with register CCB. If this is the only use of this channel
223 1101 (as is likely), then the LUB/ISB/RAB will be deallocated.
224 1102
225 1103 BAS$$CB_POP ();
226 1104 END;
227 1105
228 1106 END;
```

! end of BAS\$CLOSE

.TITLE BAS\$CLOSE
.IDENT \1-008\

.EXTRN BAS\$\$CB_PUSH, BAS\$\$CB_POP
.EXTRN BAS\$\$STOP_IO, BAS\$\$PUR_IO_CLO
.EXTRN BAS\$FIELD_CLOSE
.EXTRN BAS\$\$CLOSE_ALL, OTS\$\$CLOSE_FILE
.EXTRN BAS\$K_PROLOSSOR

.PSECT _BAS\$CODE, NOWRT, SHR, PIC, 2

.ENTRY BAS\$CLOSE, Save R2, R3, R11
MOVL FP, FMP
MOVL CHANNEL, R2
BEQL 4\$

53 080C 00000
52 04 5D D0 00002
AC D0 00005
51 13 00009

: 1010
: 1054
: 1060
:

BAS\$CLOSE
1-008

I 7
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VAX-11 Bliss-32 V4.0-742
[BASRTL.SRC]BASCLOSE.B32;1

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			00000000G	50	D4	0000B	CLRL	R0		1067
				00	16	0000D	JSB	BAS\$CB_PUSH		
	FF4C	CB	0C	A3	D0	00013	MOVL	12(FMP), -180(CCB)		1068
09	00000000G	00		00	FB	00019	CALLS	#0, BAS\$PUR_10_CLO		1073
	A1	AB		06	E1	00020	BBC	#6, -95(CCB), 1\$		1078
				52	DD	00025	PUSHL	R2		1080
	00000000G	00		01	FB	00027	CALLS	#1, BAS\$FIELD_CLOSE		
		24	FC	AB	E9	0002E	BLBC	-4(CCB), 3\$		1086
0B	FF	AB		03	E1	00032	BBC	#3, -1(CCB), 2\$		1093
		7E	DO	AB	3C	00037	MOVZWL	-48(CCB), -(SP)		
	00000000G	00		01	FB	0003B	CALLS	#1, BAS\$CLOSE_ALL		
	00000000G	00		00	FB	00042	CALLS	#0, OTS\$CLOSE_FILE		1095
		0A		50	E8	00049	BLBS	R0, 3\$		
		7E		01	CE	0004C	MNEGL	#1, -(SP)		
	00000000G	00		01	FB	0004F	CALLS	#1, BAS\$STOP_10		
			00000000G	00	16	00056	JSB	BAS\$CB_POP		1103
				04	0005C	4\$:	RET			1106

; Routine Size: 93 bytes, Routine Base: _BAS\$CODE + 0000

: 229 1107 1
: 230 1108 1 END
: 231 1109 1
: 232 1110 0 ELUDOM

! end of module BAS\$CLOSE

PSECT SUMMARY

Name	Bytes	Attributes
_BAS\$CODE	93	NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	1	0	581	00:01.2

COMMAND QUALIFIERS

; BLISS/CHECK=(FIELD, INITIAL, OPTIMIZE)/NOTRACE/LIS=LIS\$:BASCLOSE/OBJ=OBJ\$:BASCLOSE MSRC\$:BASCLOSE/UPDATE=(ENH\$:BASCLOSE)

BASSCLOSE
1-008

J 7
16-Sep-1984 00:07:54

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: Size: 93 code + 0 data bytes
: Run Time: 00:09.0
: Elapsed Time: 00:23.0
: Lines/CPU Min: 7375
: Lexemes/CPU-Min: 41534
: Memory Used: 119 pages
: Compilation Complete

0020 AH-BT13A-SE
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